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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,804	01/10/2005	Jens Pollmann-Retsch	DE 020173	9925

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BRIARCLIFF MANOR, NY 10510

EXAMINER

WALFORD, NATALIE K

ART UNIT	PAPER NUMBER
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2879

MAIL DATE	DELIVERY MODE
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10/19/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/520,804	Applicant(s) POLLMAN-RETSCH ET AL.	
	Examiner Natalie K. Walford	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 21-24 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6,9 and 15 is/are allowed.
- 6) ☒ Claim(s) 1-5,7,8,10-14 and 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

The Amendment, filed on August 8, 2007, has been entered and acknowledged by the Examiner. Newly added claims 17-24 has been entered. Claims 1-24 are pending in the instant application.

Election/Restrictions

Newly submitted claims 21-24 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The originally presented invention was for a discharge lamp, not the method for cooling a discharge lamp. The method of cooling the discharge lamp is independent and distinct from the invention originally claimed for the discharge lamp.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 21-24 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7-8, 10-15, and 17-20 are rejected under 35 U.S.C. 102(B) as being anticipated by Ury et al. (US 4,695,757).

Regarding claim 1, Ury discloses a discharge lamp (item 30) in figure 2 having a reflector (item 36) and cooling means, which cooling means has at least one nozzle (item 64 or 66) through which a flow of gas (not labeled) can be directed onto the discharge lamp, wherein the at least one nozzle is arranged such that it does not extend, at least to any substantial degree, into a beam path produced by the lamp and the reflector (see FIG. 2).

Regarding claim 2, Ury discloses a discharge lamp as claimed in claim 1, wherein the at least one nozzle is inserted in a hole (item 40) in the reflector.

Regarding claim 3, Ury discloses a discharge lamp as claimed in claim 1, wherein a velocity of the flow of gas emerging from the at least one nozzle is of a value such that a turbulent flow is produced that surrounds at least part of the lamp (column 2, lines 59-68).

Regarding claim 4, Ury discloses a discharge lamp as claimed in claim 1, wherein at least two nozzles (items 64 or 66) that are at an angle to one another are directed at the discharge lamp such that a turbulent flow is produced that surrounds at least part of the lamp (see FIG. 2).

Regarding claim 5, Ury discloses a discharge lamp as claimed in claim 4, wherein the nozzles are at an angle of approximately 90° to one another (see FIG. 2).

Regarding claim 7, Ury discloses a discharge lamp as claimed in claim 1, wherein at least one first nozzle (item 64) is directed at a region of a discharge vessel that is at the top in the position in which the discharge lamp is operating (see FIG. 2), and at least one second nozzle (item 66) is directed at a region of the discharge vessel that is at the bottom in this same operating position (see FIG. 2).

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Regarding claim 8, Ury discloses a discharge lamp as claimed in claim 7, wherein a velocity of the flow of gas passing through at least one of the nozzles can be controlled as a function of the operating position of the discharge lamp (column 2, lines 1-11).

Regarding claim 10, Ury discloses a discharge lamp in figure 2 comprising a discharge element (item 30); a reflector (item 36) about the discharge element for producing a beam path toward an exit window (top of item 36); cooling means, comprising at least one nozzle (item 64 or 66) arranged at the exterior of the reflector and having an opening (item 40) at the boundary of the reflector inside the lamp, the nozzle pointing toward the discharge element (see FIG. 2), but not parallel to an axis of symmetry created by the discharge element and a neck of the reflector (see FIG. 2).

Regarding claim 11, Ury discloses the lamp of claim 10 comprising at least one second nozzle (item 64 or 66), also having an opening at the boundary of the reflector inside the lamp (see FIG. 2), pointing toward the discharge element, but not parallel to the axis, the second nozzle forming an angle with respect to the first nozzle such that a turbulent flow is produced around the discharge element (see FIG. 2).

Regarding claim 12, Ury discloses the lamp of claim 10, wherein the nozzle is arranged perpendicularly to the beam path (see FIG. 2).

Regarding claim 13, Ury discloses the lamp of claim 10, comprising at least first and second nozzles arranged approximately opposite each other across the axis (see FIG. 2).

Regarding claim 14, Ury discloses the lamp of claim 10, wherein the nozzle is arranged near the exit window and pointing back approximately toward a neck of the reflector (see FIG. 2).

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Regarding claim 15, Ury discloses the lamp of claim 10, wherein the nozzle is not arranged in a neck of the reflector (see FIG. 2).

Regarding claim 17, Ury discloses a discharge lamp in figure 2 having a discharge element (item 30), a reflector (item 36) and cooling means, which cooling means includes at least one nozzle (item 64 or 66) through which a flow of gas (not labeled) can be directed onto the discharge lamp, wherein the at least one nozzle is arranged such that neither the nozzle nor an opening (item 40) in the reflector accommodating the nozzle substantially reduces an amount of light in a beam path produced by the element and the reflector (see FIG. 2).

Regarding claim 18, Ury discloses the discharge lamp of claim 3, wherein the flow of gas is not pulsed (column 2, lines 59-68).

Regarding claim 19, Ury discloses the discharge lamp of claim 8, wherein control of the flow as a function of position occurs automatically responsive to sensed position (column 2, lines 59-68).

Regarding claim 20, Ury discloses the discharge lamp of claim 7, wherein the flow is adapted for non-uniform cooling so that a top portion of the discharge vessel is cooled more than a bottom portion (column 2, lines 1-11).

Allowable Subject Matter

Claims 6, 9, and 16 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 6, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 6, specifically for the limitation of a first

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sensor arranged adjacent at least one of the nozzles to sense the velocity and/or the pressure and/or the flow-rate of a flow of gas passing through the nozzle in combination with other claimed features of the present claimed invention.

Regarding claim 9, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 9, specifically for the limitation of a second sensor is provided to sense the operating position of the discharge lamp and to control the velocity of the flow of gas passing through at least one of the nozzles as a function of the operating position in combination with other claimed features of the present claimed invention.

Regarding claim 16, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 16, specifically for the limitation of at least one first sensor for measuring a cooling effect of the nozzles; and at least one second sensor for detecting an operation position of the lamp.

Response to Arguments

Applicant's arguments with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalie K. Walford whose telephone number is (571)-272-6012. The examiner can normally be reached on Monday-Friday, 8 AM - 4:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571)-272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

nkW

A handwritten signature in black ink, followed by the date "10/15/04" written vertically below it.

Sikha Roy
SIKHA ROY
PRIMARY PATENT EXAMINER